

## Abstract

### Re-configurable multiplexer, method for making it and branching unit for terrestrial radio links

Disclosed is a multiplexer that can be easily reconfigured, in the sense that the number of channels can be reduced or expanded by replacing the filters with suitable reactive loads and vice-versa. Although such loads are easy to manufacture, they are designed in such a way that the electrical characteristics of the remaining reconfigurable multiplexer maintains unaltered and additional tuning is not required. The present solution allows reducing both costs and losses of the branch by eliminating the circulators, although maintaining part of their flexibility.